



State Revolving Fund Loan Programs

Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

CITY OF GREENSBURG

**Phase 2A Drinking Water Projects (in part): Improvements to Flatrock River
Intake Facility, Upland Reservoir Pump Station, Treatment Plants #1 & #2, and
Construction of Treatment Plant #3
STATE REVOLVING FUND PROJECT # DW07 03 16 03**

DATE: August 17, 2007

DEADLINE FOR SUBMITTAL OF COMMENTS: September 17, 2007

I. INTRODUCTION

The above entity has applied to the State Revolving Fund Loan Program (SRF) for a loan to finance all or part of the drinking water project described in the accompanying Environmental Assessment (EA). As part of facilities planning requirements, an environmental review has been completed which addresses the project's impacts on the natural and human environment. This review is summarized in the attached EA.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The SRF has evaluated all pertinent environmental information regarding the proposed project and determined that an Environmental Impact Statement is not necessary. Subject to responses received during the 30-day public comment period, and pursuant to Indiana Code 4-4-11, it is our preliminary finding that the construction and operation of the proposed facilities will result in no significant adverse environmental impact. In the absence of significant comments, the attached EA shall serve as the final environmental document.

III. COMMENTS

All interested parties may comment upon the EA/FNSI. Comments must be received at the address below by the deadline date above. Significant comments may prompt a reevaluation of the preliminary FNSI; if appropriate, a new FNSI will be issued for another 30-day public comment period. A final decision to proceed, or not to proceed, with the proposed project shall be effected by finalizing, or not finalizing, the FNSI as appropriate. Comments regarding this document should be sent within 30 days to:

**Max Henschen
Senior Environmental Manager
State Revolving Fund – IGCN 1275
100 N. Senate Ave.
Indianapolis, IN 46204
317-232-8623**

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address: City of Greensburg
314 West Washington Street
Greensburg, Indiana 47240

SRF Project Number: DW07 03 16 03

Authorized Representative: Frank P. Manus, Mayor

II. PROJECT LOCATION

The city proposes to implement projects at several sites in Greensburg and northwest of Greensburg. The following project locations are highlighted on Figure 1:

1. Flatrock River Intake Facility Improvements , Adams USGS Quadrangle, Township 11N, Range 8E, Section 12;
2. Upland Reservoir Pump Station Improvements, Adams Quadrangle, T11N, R9E, Section 20;
3. Water Treatment Plants #1 and #2 Improvements, Greensburg Quadrangle, T10N, R9E, Section 2, on northwest corner and southwest corner, respectively, of Fourth Street and Ireland Street; and
4. New Water Treatment Plant #3 Site, Greensburg Quadrangle, T10N, R9E, Section 2, on the northeast corner of Fourth Street and Ireland Street;

Other proposed improvements shown on Figure 1 will be addressed in future environmental documents.

III. PROJECT NEED AND PURPOSE

These projects are needed to meet a 3.9 million gallons per day (MGD) average daily supply demand and a 4.8 MGD maximum daily supply demand due to the Honda plant currently under construction and other existing and future residential, commercial and industrial needs in the Greensburg service area.

IV. PROJECT DESCRIPTION

A. Flatrock River Intake Facility Improvements (Figure 2)

1. New electrical building and improvements;
2. New electrical transformer;
3. New flow meter and vault;
4. Restore existing lagoon to original dimensions;
5. Replace four 300 gallons per minute (gpm) vertical turbine pumps in pump station with 350 gpm pumps;
6. Replace two 1400 gpm low lift pumps with 1500 gpm pumps in intake caisson;
7. Replace baffling in sludge lagoon;
8. Replace and upgrade piping; and
9. Install 50 yd² stone drive.

B. Upland Reservoir Pump Station Improvements (Figure 3)

1. New stand-by generator;
2. Underground piping and valve improvements;
3. Replace two 1000 gpm pumps in pump station with 1250 gpm pumps;
4. Install new 1250 gpm pump; and
5. Various electrical improvements.

C. Water Treatment Plant #1 Improvements (Figure 4)

1. Repair and seal deteriorated clarifier concrete;
2. Replace tray aerator;
3. Add new high service pumps;
4. Replace dry alum feeders;
5. Construct 2 chemical feed rooms;
6. Replace backwash waste clarifier sludge pumps;
7. Various HVAC improvements;
8. Various electrical improvements; and
9. Various underground piping modifications.

D. Water Treatment Plant #2 Improvements (Figure 4)

1. Improve clarifier mechanism;
2. Replace tray aerator;
3. Replace dry alum feed equipment;
4. Upgrade chlorine equipment;
5. Various HVAC improvements;
6. Various electrical improvements; and
7. Modify coagulant storage room.

E. New Water Treatment Plant #3 (Figure 4)

1. 2.0 MGD ground water treatment plant with water receiving well, sampling vault, site fencing and standby generator;
2. Install mains to connect new plant to existing surface water plants #1 & #2.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary

Construction Costs

a. Flatrock River Intake Facility and Upland Reservoir	\$1,784,000
Pump Station Improvements	
b. Water Treatment Plants #1 & #2 Improvements	957,000
c. Groundwater Treatment Plant	<u>2,818,000</u>
	\$5,559,000
	contingencies <u>555,900</u>
	subtotal \$6,114,900

Non-Construction Costs

Engineering, legal and accounting	<u>2,731,100</u>
Total Estimated Project Costs	\$8,846,000

- B. Greensburg will borrow approximately \$7,880,000 toward these projects from the State Revolving Fund (SRF) Loan Program for a 20-year term at an interest rate to be determined at the loan closing. Monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

No Action: The no-action alternative would not provide increased pump capacity or improved and upgraded treatment systems and therefore was rejected.

Water supplies from neighboring water utilities: This alternative was rejected due to cost and inadequate supply.

Improve existing facilities and construct new ground water treatment plant: As outlined in Section IV, this is the selected alternative. This alternative, while ambitious, is only part of a larger plan to address water needs. Future environmental documents will address a new 24-inch raw water main from the Flatrock River Intake Facility to the treatment plants and other future projects, which are illustrated on the attached graphics.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Undisturbed Land: All land affected by the proposed projects has been significantly disturbed by previous construction activity. Much of the work will occur within existing structures. However, if any archaeological artifacts or human remains are uncovered during construction, federal law and regulations (16 USC 470 et seq.) and, additionally, state law (Indiana Code 14-21-1), require that work must stop and that the discovery must be reported to the Department of Natural Resources' Division of Historic Preservation and Archaeology within two business days.

Structural Resources (Figures 5, 6, & 7): The project will not affect historic structural resources. Audible or visual effects will be temporary. The SRF's finding pursuant to Section 106 of the National Historic Preservation Act is: "no historic properties affected."

Prime Farmland: Only the improvements at the Flatrock River Intake Facility will affect prime farmland.

Wetlands (Figures 8 & 9): These projects will not affect wetlands.

Surface Waters: These projects will not affect surface waters. There are no stream crossings.

100-Year Floodplain (Figures 10 & 11): None of the projects will occur in a 100-year floodplain.

Flatrock River Intake Facility Improvements: The caisson is the lowest point in this project area and is just outside the 100-year floodplain.

Upland Reservoir Low Service Pump Station Improvements: The pump station and generator site are located approximately 1,700 feet south of Clifty Creek and 1,700 feet from an unnamed tributary to Clift Creek which is just east of I-74. No floodplain areas have been delineated for either Clifty Creek or the tributary at this locale.

Improvements to Water Treatment Plants #1 and #2 and Construction of New Ground Water Treatment Plant (Plant #3): These project areas are outside of the Muddy Fork Sand Creek 100-year floodplain.

Groundwater: Groundwater will not be negatively affected by the proposed project. There are no sole source aquifers in the project area.

Air Quality: Air quality will be temporarily impacted by construction activities, including vehicle exhaust and dust.

Plants and Animals: These projects will not affect endangered plants or animals. No trees will be removed to implement these improvements

Open Space and Recreational Opportunities: The project's construction and operation will neither create nor destroy open space and recreational opportunities.

The project will not affect National Natural Landmarks.

B. Indirect Impacts

The city's Preliminary Engineering Report (PER) states: *"The City of Greensburg and Decatur County have competent planning and zoning departments, and strive to protect sensitive environmental resources, including wetlands, 100-year floodplains, forested areas and inventoried historic/architectural sites from future growth. Protection of these resources will be accomplished through appropriate zoning ordinances, proper planning practices and appropriate mitigations."*

C. Comments from Environmental Review Authorities

This document serves as the first notice to most environmental review authorities.

The Natural Resources Conservation Service, in correspondence dated February 5, 2007, noted that at least some of the proposed work at the Flatrock River Intake Facility would convert prime farmland.

VIII. MITIGATION MEASURES

The city's PER states:

Noise impacts from construction activities would be minimized. In addition, the hours of construction activity will be limited to daylight hours (except in case of an emergency) to minimize noise disturbances. Proper cleanup practices will be required to reduce the creation of dust or other construction debris nuisances. In general, efforts will be made to avoid construction-related impacts. Where an impact cannot be avoided, appropriate mitigation measures will be utilized. For example, a Rule 5 Stormwater Pollution Prevention Plan will be prepared for each construction project to reduce erosion and contamination resulting from construction, and all necessary permits will be obtained in order to full comply with regulatory requirements.

The construction specifications will require that proper mitigation measures be used to control sedimentation and erosion of the soil from construction sites. Mitigation methods for construction may include, but are not limited to, the following:

- *Excavation will be kept to a minimum in order to reduce erosion problems.*
- *Piping installation methods, including jacking and boring and horizontal directional drilling, will be implemented in specific locations to avoid impacts to wetlands, creeks, wooded areas, and roadway traffic.*
- *Appropriate erosion control measures such as sediment basins, staked hay bales, rip-rap, seeding, and mulching will be provided during and after construction where necessary.*
- *Drainage systems will be stabilized as early as possible to avoid sedimentation.*
- *Surface and subsurface drainage patterns will be restored as early as possible.*
- *Measures will be taken to avoid excessive construction debris and soil being tracked onto existing roadways.*
- *Areas of exposed soil will be wetted periodically as needed to control dust.*

IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held at the City Hall at 5:00 PM on December 20, 2006. Members of the Municipal Water Board raised questions about an existing 14-inch water line and future reservoir construction. The city received no written comments in the 5-day period following the hearing.



PROPOSED PHASE 2 PROJECT AREAS
WATERWORKS IMPROVEMENTS PROGRAM
CITY OF GREENSBURG, INDIANA
NOVEMBER 2006
REVISED AUGUST 2007

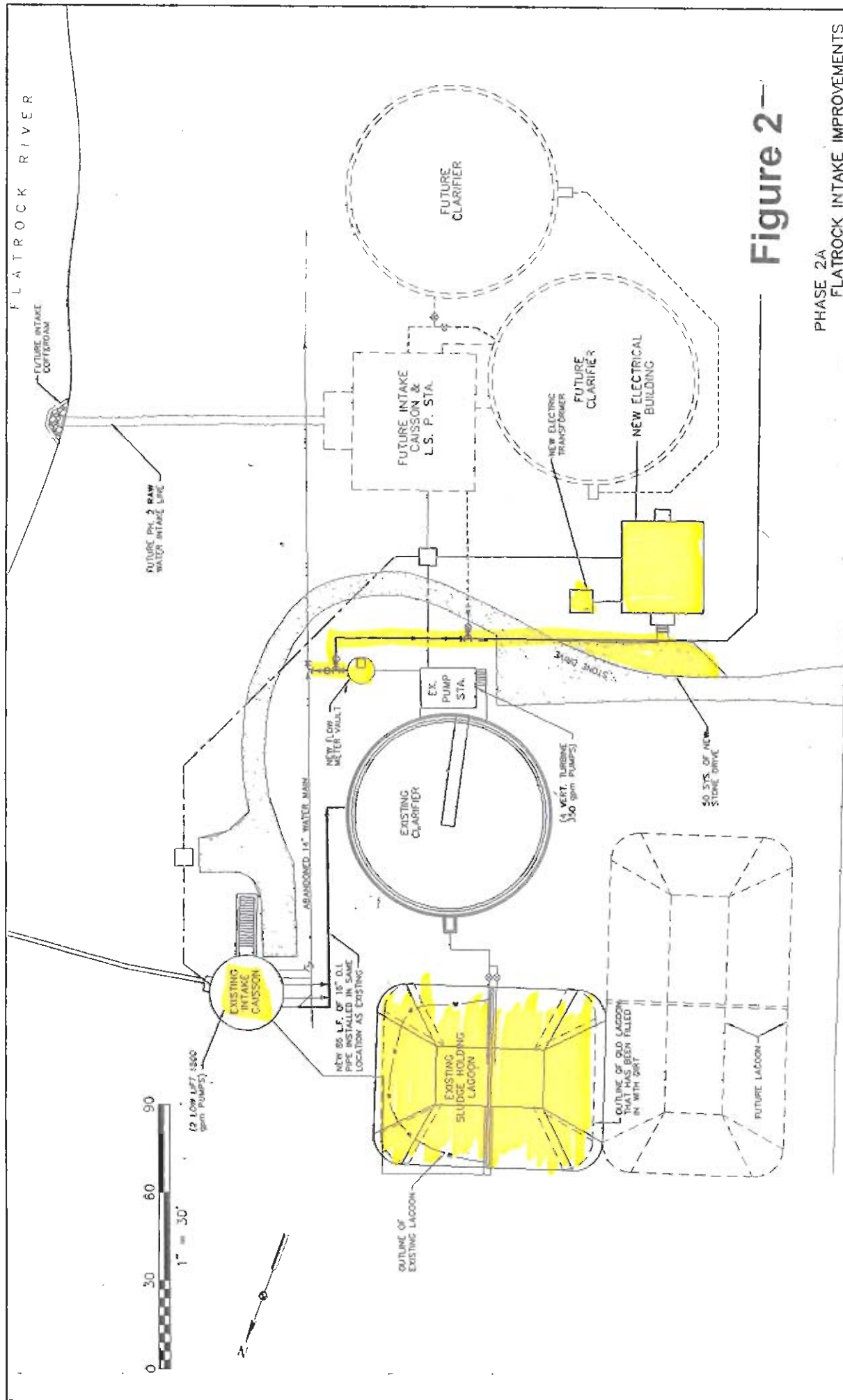


Figure 2

EXISTING 14" RAW WATER MAIN

EXISTING PUMP STATION
TO BE UPGRADED

UPLAND
RESERVOIR
(EXISTING)

I-74

OLD US 421

HONDA
PROPERTY

N

0 300 600 900
1" = 300'

Figure 3

PHASE 2A ENLARGED SITE PLAN
UPLAND RESERVOIR PUMP STATION IMPROVEMENTS
WATERWORKS IMPROVEMENTS PROGRAM PER
CITY OF GREENSBURG, INDIANA
NOVEMBER 2006

HNTB

EXISTING WTP NO. 1
(SURFACE WATER
TREATMENT)

EXISTING WTP NO. 2
(GROUND WATER TREATMENT)

16"Ø FINISHED WATER TO EXISTING
CLEARWELL

16"Ø RAW WATER
FROM WELLS

NEW 2MGD GROUND WATER
TREATMENT PLANT #3

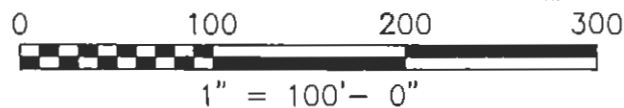


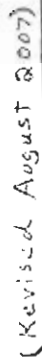
Figure 4

PHASE 2A SITE PLAN

HNTB

WATERWORKS IMPROVEMENTS PROGRAM PER
CITY OF GREENSBURG, INDIANA
NOVEMBER 2006
REVISED AUGUST 2007

Downeyville is located in the northwest corner of the township and named after its founder Amos Downey. The Banta Mill was in operation in the area when Downey purchased the land. The mill continued to be the only industry in town for many years. The Star Baptist Church (10032), located



Washington Township (20001-037)

Washington Township is characterized by good roads, productive soil, the location of the county seat, and adequate shipping facilities. Located in almost the exact center of Decatur County, Washington Township contains about 54 square miles. It was laid out in May of 1822. The township was originally larger than it is today as Salt Creek, Marion, Jackson, and Sand Creek townships were subsequently formed from it. The first land entry was made in Washington Township in October of 1820 by Thomas Hendricks.

There are many well-preserved Italianate farmhouses remaining (20001, 20006, 20016, 20027, 20028, 20034) in Washington Township. Noteworthy also are the 1864 Walter Pleak house (20004), the F Robbins farm (20019), the J. Robbins farm (20021), the Duncan farm (20023), and the Foley farm (20025). Similar houses owned by members of the Hamilton family are listed separately as the Hamilton Family Rural Historic District following the township catalogue.

The only round barn in Decatur County is in Washington Township just northwest of Greensburg. The Strauther Pleak Round Barn (20003) was built in 1911 (see cover). Its three-tiered structure gives it the appearance of a wedding cake.

Besides Greensburg, McCoy is the only other town in Washington Township. It was laid out by J. C. Adams in 1871 along the railroad. The town was platted with several streets and thirteen lots, but today only a few houses remain, including an 1886 Italianate farmhouse (20027). There were never any businesses in McCoy.

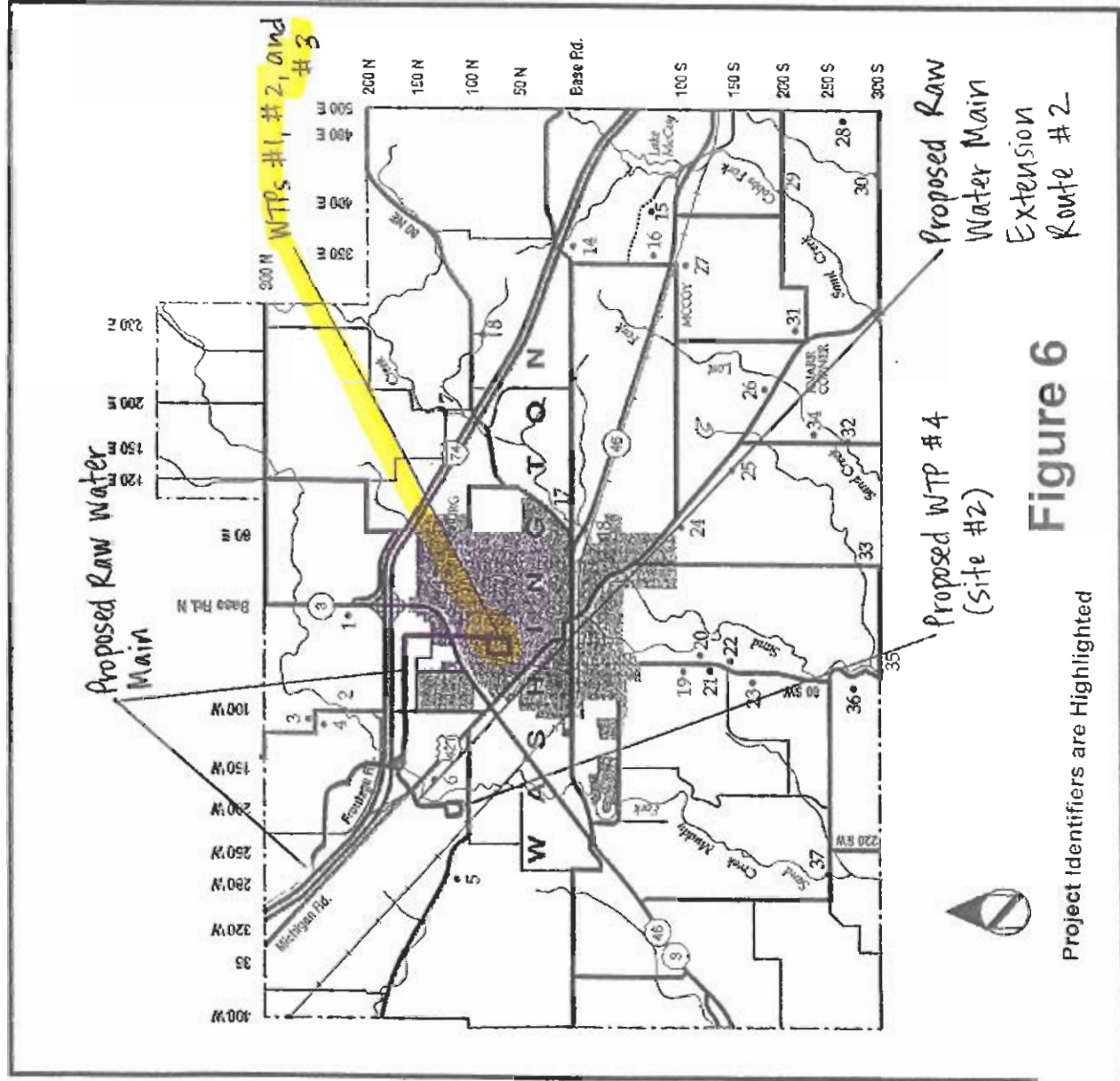


Figure 6

Project Identifiers are Highlighted

NOTE: WTP #4 (Site #1) is located at the North Park Baseball Park (between Fourth, Sixth, Park, and Carver Streets) and has since been eliminated from consideration for construction of the plant. WTP #4 (Site #2) is located on Honda property near Muddy Fork Sand Creek and is still under consideration, although it is not likely to be selected for construction. Other potential sites for construction of WTP #4 are currently being investigated.

Greensburg Scattered Sites (24001-123), Northern Section

Proposed Raw Water Main

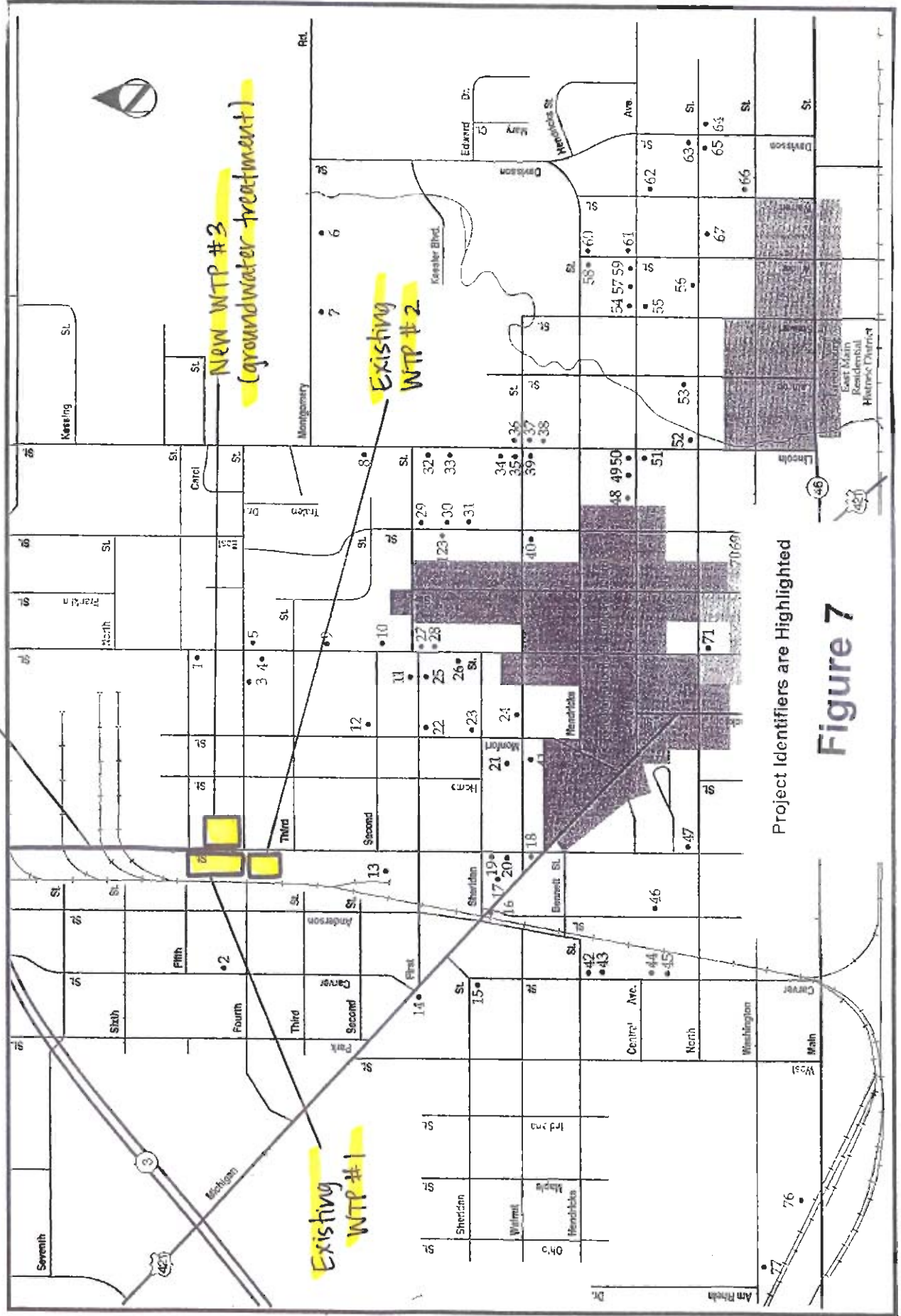
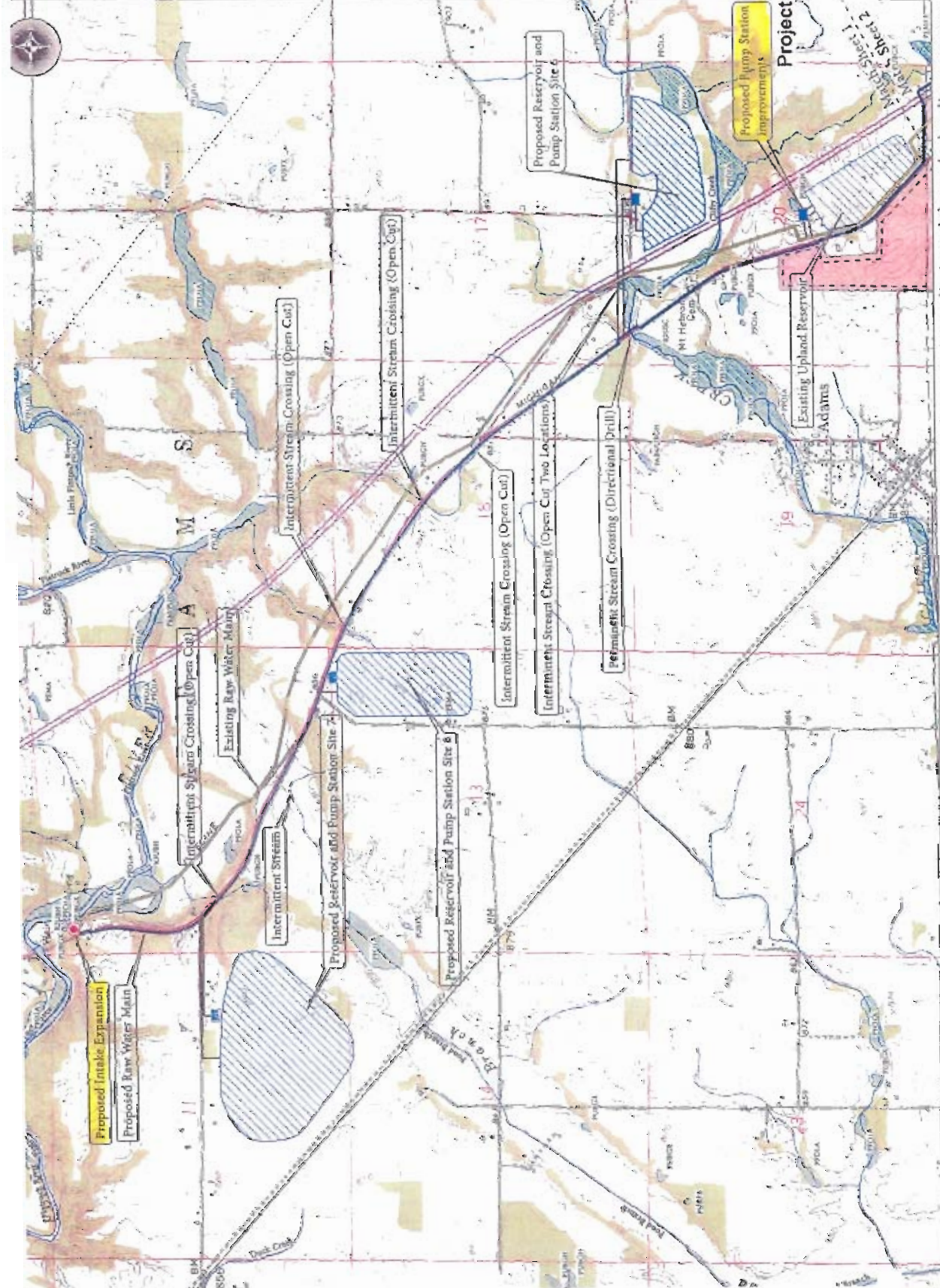


Figure 7

NOTE: WTP #4 (Site #1) is located at the North Park Baseball Park (between Fourth, Sixth, Park, and Carver Streets) and has since been eliminated from consideration for construction of the plant. WTP #4 (Site #2) is located on Honda property near Muddy Fork Sand Creek and is still under consideration, although it is not likely to be selected for construction. Other potential sites for construction of WTP #4 are currently being investigated.



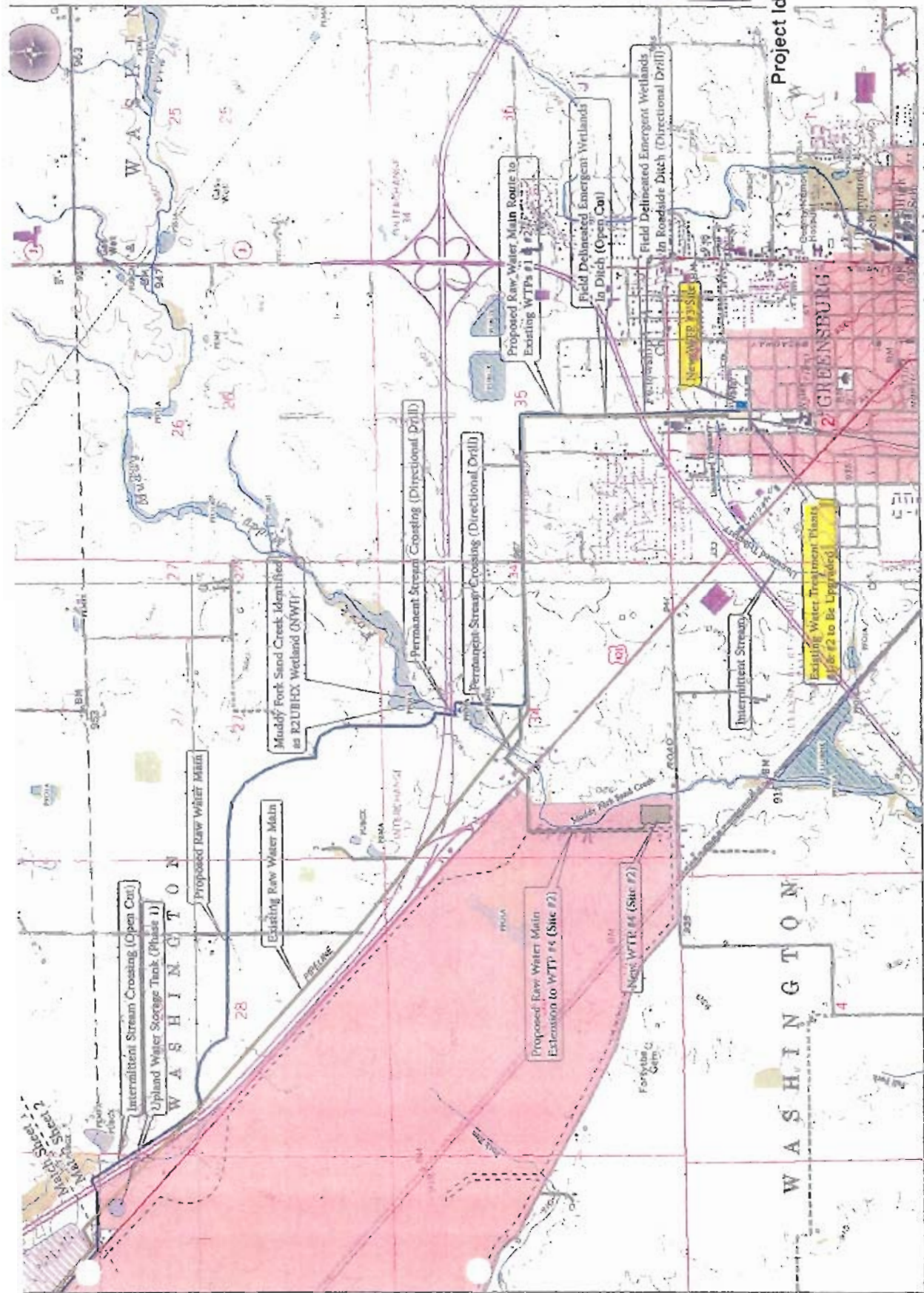
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- Legend**
- Flatrock River Intake Facility
 - Pump Station
 - Intermittent Stream
 - Raw Water Main - Grade 1 (Eliminated)
 - Proposed Raw Water Main Extension
 - Existing Raw Water Main
 - Utility Corridor
 - Proposed Pump
 - Proposed 24-inch Raw Water Main
 - Waterway
 - Directed Water Storage Tank
 - WTP #1 (Eliminated)
 - Proposed Reservoir Site
 - WTP #4 Property
 - Upland Reservoir
 - Existing WTP
 - Proposed WTP #3
 - Wetlands

Project Identifiers are Highlighted **Figure 8**

PHASE 2 PROJECTS - WETLANDS
 WATERWORKS IMPROVEMENTS PROGRAM PER
 CITY OF GREENSBURG, INDIANA
 NOVEMBER 2006
 REVISED MARCH 2007, JUNE 2007

Note: WTP #4 (Site #1) has since been eliminated due to hydraulic concerns; other sites for WTP #4 are currently being investigated.



Note: WTP #4 (Site #1) has since been eliminated due to hydraulic concerns; other sites for WTP #4 are currently being investigated.

0 1,125 2,250 4,500 6,750 9,000 Feet

Figure 9

PHASE 2 PROJECTS - WETLANDS
WATERWORKS IMPROVEMENTS PROGRAM PER
CITY OF GREENSBURG, INDIANA
NOVEMBER 2006
REVISED MARCH 2007, JUNE 2007

REVISED MARCH 2007, JUNE 2007
NOVEMBER 2009



Legend
 Flarecock River Intake Facility

Dr. Robert C. Anderson
 Director, Center for the Study of the American West
 University of Colorado, Boulder, CO

16 Pump station
[continued from p. 15]

— *Das Meer, Farnstein, Gestein, Pflanzen*

Proposed Raw Water Main Extension

• *Kenning?*
 ... *Excluding How Water Mains*

- - Utility Corridor

Proposed Paper

Proposed 24-m-ft Raw Water Main

— Whitefly

Elevated Water Storage Tank

WTP #4 (site eliminated)

Proposed Retaining Wall

 Honda Property

☐ Upland Kestrel☐ Existing WTP

Proposed WIPB

Flood Hazard Areas

 Wiley

Identifiers are Highlighted

•

Figura 10

Figure 10

PHASE 2 PROJECTS - FLOODPLAIN

THE UNIVERSITY OF CHICAGO PRESS

CITY OF GREENSBURG, INDIANA

NOVEMBER 2006

REVISED MARCH 2007, JUNE 2007

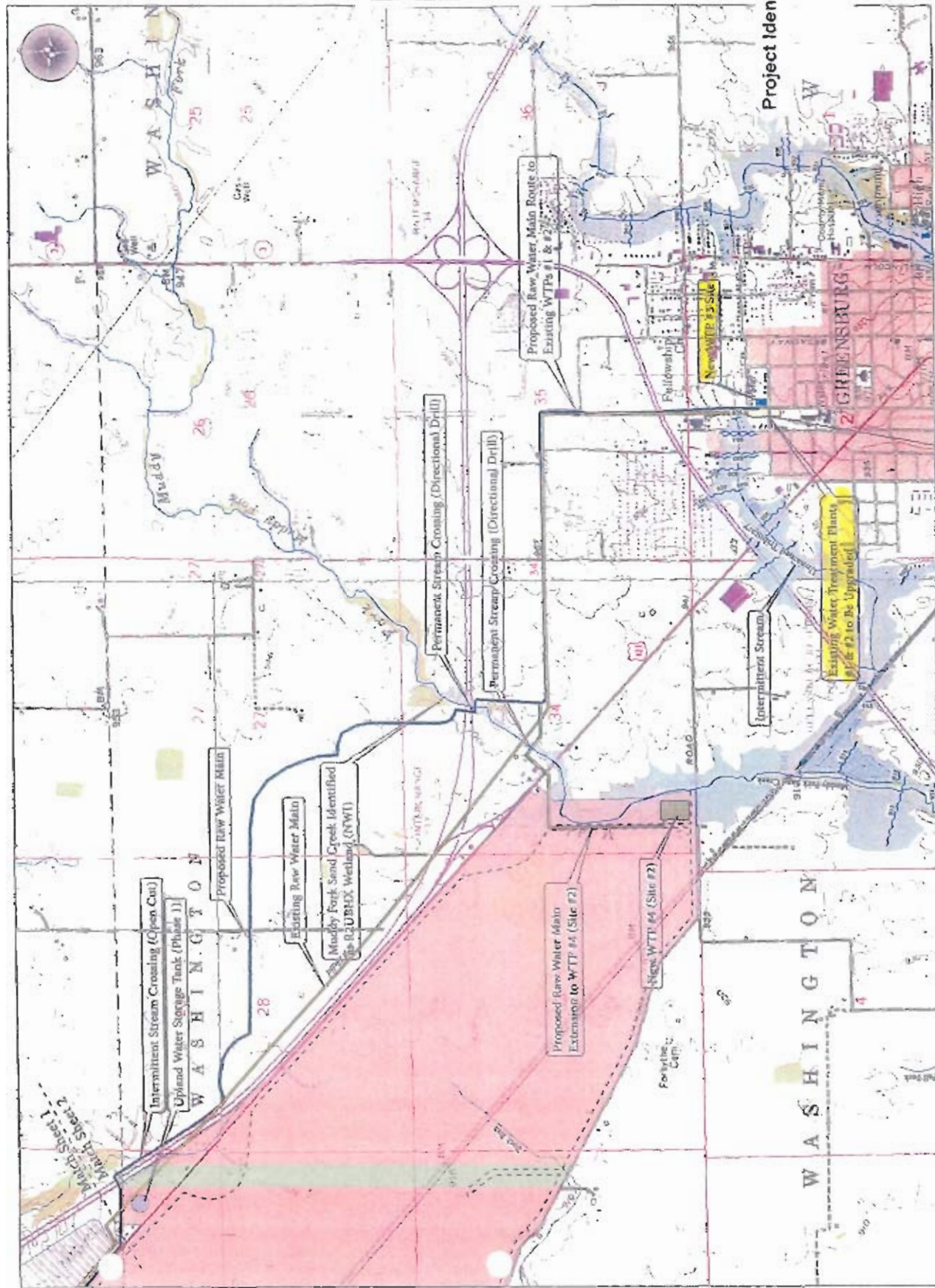
Note: WTP #4 (Site #1) has since been eliminated due to hydraulic concerns; other sites for WTP #4 are currently being investigated.

Other sites for WTP are currently being investigated

Figure 10

PHASE 2 PROJECTS - FLOODPLAINS
WATERWORKS IMPROVEMENTS PROGRAM
CITY OF GREENSBURG, INDIANA
NOVEMBER 2008
REVISED MARCH 2007, JUNE 2007

NOVEMBER 2006



HNTB

- Legend**
- Flintrock River Intake Facility
 - Pump Station
 - Intermittent Stream
 - Raw Water Extension - Road 1 (Eliminated)
 - Proposed Raw Water Main Extension - Road 2
 - Existing Raw Water Main
 - Utility Corridor
 - Proposed Pipeline
 - Proposed 24-inch Raw Water Main
 - Waterway
 - Elevated Water Storage Tank
 - WTP #4 (Site Eliminated)
 - Proposed Reservoir Site
 - Honda Property
 - Upland Reservoir
 - Existing WTP
 - Proposed WTP #3
 - Flood Hazard Area
 - Wetlands

Project Identifiers are Highlighted

Figure 11

PHASE 2 PROJECTS - FLOODPLAIN
WATERWORKS IMPROVEMENTS PROGRAM
CITY OF GREENSBURG, INDIANA
NOVEMBER 2006
REVISED MARCH 2007, JUNE 2007

Note: WTP #4 (Site #1) has since been eliminated due to hydraulic concerns.

0 1,125 2,250 4,500 6,750 9,000 Feet